# energy

With more than 13,000 employees and 177 buildings, Maricopa County is leveraging its assets and activities to make great strides in energy reduction. According to the Environmental Information Administration the buildings in the U.S. consume 72% of the electricity generated. Energy efficiency is becoming even more necessary as Maricopa County continues to add residents to its population base using more finite fossil fuel energy. The Maricopa County Green Government Program has identified detailed measures that are being implemented to help reduce energy usage within County buildings.

#### **Did You Know?**

# Maricopa County has over 4MW of solar installed.



#### **Action Statement**

Reduce energy consumption by 7.5% from 2009 baseline by 2015.





Tag	Department	Measure Detail	Due	Status	Impact Icons
EN1	Air Quality Department	Air Quality will utilize the Maricopa County Board of Supervisor approved policy to purchase "green" supplies, furniture, equipment and vehicles.	July 2012	On-Going	0
EN2	Animal Care and Control	Phase out individual desktop printers and replace with networked printers/copiers.	July 2011	Accomplished	<b>O</b>
EN3	Animal Care and Control	Conduct a feasibility study for a solar PV system on the west shelter.	July 2013	Not Started	0
EN4	Flood Control District	Research sitting possibilities for solar installations on Flood Control District parcels.	July 2014	On-Going	
EN5	Facilities Management	Have some employees achieve <u>US Green Building Council LEED Accreditation</u>	July 2013	On-Going	
EN6	Facilities Management	Ensure that all future landscaping uses only native species plants or near native adapted low-water use plants.	July 2013	On-Going	00
EN7	Facilities Management	Ensure that all new county buildings utilize a renewable energy source, and/ or green power when feasible.	July 2013	On-Going	<b>90</b>





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EN8	Facilities Management	Have an established membership and be an active participant in the following organizations:  US Green Building Council Association of Energy Engineers Distributed Energy Association of Arizona Illuminating Engineering Society Municipal Energy Alliance of Greater Phoenix Sustainable Cities Network	July 2010	On-Going	
EN11	Facilities Management	<ul> <li>Implement the following projects and operations using a Board of Supervisors-approved Energy Program budget:</li> <li>Commission each new building to ensure that Facilities Management operational needs are met, building systems perform efficiently, and building operators are properly trained</li> <li>Perform energy audits and retro-commission existing buildings</li> <li>Use the Facilities Automation System to provide comfort to building occupants with minimum usage of energy</li> <li>Use high efficiency motor replacements</li> <li>Install variable frequency drive systems for pumps, motors, and chillers</li> <li>Use fuel-efficient landscape maintenance equipment and ban all two-cycle pieces as technology permits transition</li> <li>Use high-efficiency evaporative cooling where applicable</li> <li>Retrofit meters for connectivity through the internet for improved energy management</li> </ul>	July 2014	Completed/ On-Going	•
EN12	Facilities Management	Implement a program to install 25-watt 4 ft. fluorescent lamps to replace existing 32-watt lamps in all county owned-managed buildings.	July 2012	Accomplished	0
EN13	Facilities Management	Complete a vegetated roof feasibility study.	July 2011	Accomplished	00





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EN14	Facilities Management	Update FMD Technical Specifications to incorporate Green Government Program Measures. Continue to evaluate energy saving technologies and incorporate into the Technical Specifications as appropriate.	July 2013	Not-Started	0
EN15	Facilities Management	Install sub-meters on 60% of all county owned/managed buildings.	July 2014	Launched	0
EN16	Facilities Management	Distribute dashboard energy reporting system to appropriate decision makers and technical specialists in order to link and monitor energy consumption/production for all applicable county owned and managed buildings.	July 2014	Launched	0
EN17	Facilities Management	Obtain Energy Star ratings for three additional County owned buildings.	July 2014	Launched	0
EN18	Facilities Management	Study the feasibility of the County participating in the APS Peak Solutions program and implement if desirable.	July 2020	Launched	0
EN19	Facilities Management	Study the feasibility of using commodity pricing for natural gas purchases.	July 2014	Not Started	0
EN20	Facilities Management	Study the feasibility of using fuel cell technology for remote locations, back- up power and peak demand shaving.	July 2014	Not Started	0





Tag	Department	Measure Detail	Due	Status	Impact Icons
EN21	Facilities Management	Continue to invest in opportunities for cost effective renewable energy projects.	July 2014	On-Going	0
EN22	<u>Human Services</u>	Integrate green building techniques into Community Development construction projects.	July 2012	On-Going	
EN23	<u>Human Services</u>	Provide development sustainability education to at least 90% of individuals/families served through HSD's LIHEAP.	July 2014	Launched	
EN24	<u>Human Services</u>	Promote sustainability by changing business practices within HSD.	July 2012	Launched	
EN25	<u>Library District</u>	Construct all future libraries to a minimum of LEED-Certified standards.	July 2010	On-Going	
EN26	<u>Library District</u>	Purchase Energy Star compliant electronic equipment when possible.	July 2013	On-Going	0
EN27	Parks and Recreation	Construct 100% of all new Nature Centers to a minimum of <u>LEED-Silver</u> standards.	July 2013	On-Going	





Tag	Department	Measure Detail	Due	Status	Impact Icons
EN28	Planning and Development	Implement an optional residential Green Building program.	July 2013	Launched	
EN29	Planning and Development	Facilitate and expedite permitting and construction inspections for solar energy related projects.	July 2013	On-Going	
EN30	Planning and Development	Prepare a comprehensive policy for adaptive reuse of brownfields for solar energy generation facilities.	July 2013	Not Started	

— Theodore Roosevelt.



<sup>&</sup>quot;To waste, to destroy, our natural resources, to skin and exhaust the land instead of using it so as to increase its usefulness, will result in undermining in the days of our children the very prosperity which we ought by right to hand down to them."



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